

WHAT IS CLAIMED IS:

1. An electroluminescent display device, comprising:
a first electrode;
a function layer including a luminescent layer; and
a transparent second electrode made of a metal oxide, which are laminated on a substrate in that order from the lower surface,
the oxygen concentration in the second electrode varying in the film thickness direction, and the oxygen concentration in the vicinity of an interface between the second electrode and the function layer being lower than an average oxygen concentration in the second electrode.
2. The electroluminescent display device according to Claim 1, the oxygen concentration in a lower portion, that is, a portion toward the function layer, of the second electrode being lower than the oxygen concentration in an upper layer side of the second electrode.
3. A method to manufacture an electroluminescent display device, comprising:
forming a first electrode above a substrate;
forming a function layer including a luminescent layer on the first electrode;
and
sputtering a metallic material on the function layer in an atmosphere of an oxygen-containing carrier gas, so as to form a transparent second electrode made of a metal oxide on the function layer,
the partial pressure of oxygen in the carrier gas being increased with increased deposition of the metal oxide deposited on the function layer during the sputtering.
4. The method to manufacture an electroluminescent display device according to Claim 3, the partial pressure of oxygen being increased continuously or stepwise when the partial pressure of oxygen in the carrier gas is increased during the sputtering.
5. The method to manufacture an electroluminescent display device according to Claim 3, the partial pressure of oxygen in the carrier gas being controlled to be substantially zero when the amount of deposition is less than a predetermined film thickness during the sputtering.
6. The method to manufacture an electroluminescent display device according to Claim 5, the predetermined film thickness being 5 nm or more and 30 nm or less.

7. Electronic equipment, comprising:
the electroluminescent display device according to Claim 1.